

Application Number		Application for (a-urban, b-agriculture, c-DWR/WUE:	
107		a) Prop 13 Urban Water Conservation	
Principle Applicant(Organization/Affiliation)			
Westhaven Community Services District			
Project Title			
Residential Water Meter Installation			
First Name-Authorized		Last Name (AA):	Title
Courtney		Blake	Board Member
Street Address		PO Box	
		2083	
City		State	
McKinleyville		CA	
Zip Code		Telephone Number(Include Area Code)	
95519		(707) 677-3677	
Fax Number (Include Area Code)		E-mail Address	
(707) 839-8892		cblake@tidepool.com	
First Name-Contact Per	Last Name-CP:	Contact-Title	
Richard	Swisher	Manager	
Contact-Street Address		Contact-PO Box	
		2015	
Contact-City		Contact-State	
Trinidad		CA	
Contact-Zip Code		Contact-Phone Number	
95570		(707) 677-0798	
Contact-Fax Number		Contact-E-Mail Address	
(707) 677-0798		wcsd@humboldt1.com	
Funds Requested (dollar amount)	Applicant Funds Pledged (dollar amount)	Total Project Costs (dollar amount)	
\$48,480.00	\$0.00	\$48,480.00	
Estimated Total Quantifiable Project Benefits (dollar amount)		Percentage of Benefits to be Accrued by App	
\$265,000.00		1	
Percentage of Benefits to be Accrued by CALFED or other		Estimated Annual Water to be Saved (acre-fe	
		10	
Estimated Total Amount of Water to be Saved (acre-fee		Over _____ Number of Years	
Estimated Benefits to be Realized (terms of water qual,instream			
Duration of Project (month/year-month/year):		State-Wide	
06/02-09/02		<input type="checkbox"/>	
State Assembly District-location of project(1	State Senate District-location of project(1	2
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Congressional District(s)-location of project		Congressional District(s)-location of project(1	

County-location of project	Most recent Urban Water Mgt Plan Submitt		
Humboldt			
Type Applicant-Urban(a)Agricl Feas Study(b) Gra	DWR WUE Projects	Project Focus	
e) other-subdivision of state(include public water)		b) Urban	

Project Type:

a) Implementation of Urban Best Management Practices

Quantifiable Objectives

Specify from choice (d) above

Specify from (k) above

Does Proposal involve change in land use (planned/future)ICheck box if yes

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CONSOLIDATED WATER USE EFFICIENCY 2002 PROPOSAL

WESTHAVEN COMMUNITY SERVICES DISTRICT

PART TWO

Project Summary

The Westhaven Community Services District (WCSD) is seeking funding for completion of its water meter installation project. The District comprises a total of 226 service connections, of which 113 are metered. The inadequacies and inequities of a partially metered water system are clear.

The WCSD was formed in 1987, assuming ownership and operation of all facilities previously owned by the local mutual water company. A project phased over four years in the early 1990s included construction of a filter for surface water, repair of a failed storage tank, installation of reliable disinfection equipment, purchase of a well and replacement of approximately 25% of the distribution system. Much of the remaining distribution system is substandard and more than 30 years old.

In 1998, the District calculated that its 1992-1997 average daily source capacity in August had been 81,500 gallons and its average peak consumption in August had been 360 gallons per service per day. Based on these data the District's current water source capacity is just sufficient for a maximum of 226 service connections. The District boundary also includes approximately 90 homes not currently served by the District, of which 37 have been identified as having contaminated or insufficient private sources. Once all services are metered, the District will be in a position to reevaluate its capacity to provide service.

In addition to its inability to evaluate its service capacity, the District is unable to completely or accurately monitor water usage or even identify distribution system leakage. Without this information, we are unable to develop a useful local water management plan or to participate in regional or other resource management plans.

Currently, the District is unable to justify a rational pricing structure. All customers are charged a monthly fee for unlimited water usage. This fee, \$40 per month, is burdensome for many of our residents. The section of the service area with lowest income residents is almost completely metered because the water main replacement portion of the 1991 project was funded through an income-based Community Development Block Grant. These residents, who typically show below-average consumption, are paying more than they might if all customers were metered and billed by usage.

Without the ability to tie fees to customers' usage, the District is also unable either to actively promote water conservation or to passively benefit from the tendency of usage billing to reduce dry year demand.

The WCSD employs one full-time manager/operator, one part-time secretary and one part-time relief operator. The District has bought all the meters it needs and the manager

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WESTHAVEN COMMUNITY SERVICES DISTRICT

has been working on installing them for six and a half years, as time has allowed. However, at the current rate, the project would not be completed until 2008.

The District is, therefore, seeking sufficient funding to allow it to purchase the needed valves and fittings and hire a local contracting firm to complete the installation of 104 of the remaining meters.

A. Scope of Work: Relevance and Importance

1. Nature, scope, and objective of the project

The District proposes to secure a contract for the installation of 104 residential water meters, including the purchase of service valves and fittings. We anticipate that the installation work should be completed in a matter of weeks.

2. Statement of local and regional water issues

The system is supplied by three small spring-fed tributaries of Two Creek at the eastern edge of the community and a 100-foot deep well within the residential area. The creeks represent approximately 75% of total source capacity with the well accounting for the remaining 25%. During the system-upgrading project in the early 1990s, the District expended considerable resources in efforts to locate additional local water sources; however, no additional sources that could be developed in an economically feasible manner were located.

In the absence of precise data about customer consumption, the WCSD is unable to formulate a comprehensive local management plan or to participate in regional resource management planning.

One of the WCSD's chief goals continues to be that of expanding the system capacity to provide service, at the least, to the service population existing at the time of the District's formation. There appears, however, to be no viable prospect of developing the additional source capacity required for this, let alone for offering any expanded service.

A small but significant local issue is residential water theft. Because limited source capacity precludes provision of public water to all residents, the District has been plagued by unauthorized diversion of water, mainly through authorized connections. Without a fully metered system, the District is unable either to calculate these losses or take steps to prevent them.

The District's severely limited capacity makes it extremely important that the WCSD monitor and manage its current water supply in the most efficient and equitable manner possible. The completion of the meter installation project is crucial to that end.

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B. Scope of Work: Technical/Scientific Merit, Feasibility, Monitoring and Assessment

1. Methods, procedures, and facilities

The Westhaven CSD is in possession of all of the water meters needed to complete metering of the system. The meters are new Badger Model RCDL 25 5/8 X 3/4 bronze. Meters will be installed by removing customers' existing service valves and installing meter valves and downstream meter couplings. In a number of circumstances service entrance locations will be modified or moved to accommodate District access. In two cases new service laterals from an alternate main will be installed to allow abandonment of a 100 foot section of 1 inch "main" that has been repaired more than 20 times in the past 15 years.

2. Task Lists and Schedules

Westhaven CSD Task List and Schedule:

- Flag location of 76 known service valves - no relocation required
- Flag location of 4 known service valves - minor relocation required
- Flag location of 6 known service valves - major relocation required
- Flag location of 7 services valves requiring installation of new service laterals
- Locate and flag 11 currently unlocated service valves
- Determine types of fittings needed at each service
- Prepare contract specifications
- Conduct contract negotiations

Tasks listed above correspond to Budget Item b. (\$1500.00) and will be performed between 04/15/02 and 06/15/02 by the WCSD.

- Perform oversight and inspection of installations
- Prepare as-built records of installations

Tasks listed above correspond to Budget Item g. (\$1500.00) and will be performed during the period of installation by the WCSD.

Contractor Task List and Schedule:

- Perform installation of all service valves, fittings, meters and the seven new laterals as directed by the WCSD

Contractor's tasks correspond to Budget Item c. 7. (\$33,945.00) and will be performed between 06/15/02 and 09/15/02.

CONSOLIDATED WATER USE EFFICIENCY 2002 PROPOSAL
WESTHAVEN COMMUNITY SERVICES DISTRICT

3. Monitoring and Assessment

Once performance under the contract begins, we anticipate the project will be completed within a period of several weeks during the summer of 2002. The WCSD manager will personally monitor the performance of the contractor and compile written daily progress reports. The manager will also report progress to the Board of Directors on a monthly basis. The District maintains and makes available to the public reports of all its projects and ongoing activities.

4. Preliminary Plans and Specifications and Certification Statements

See attachments A and B.

C. Qualifications of the Applicants and Cooperators

1. Resume of project manager

Richard Swisher has been Manager and Lead Water Treatment Operator of the Westhaven CSD since 1988. Mr. Swisher holds California Department of Health Services T3 Water Treatment and D2 Water Distribution Certifications. He has played an active role in inspection and oversight of the District's water system improvement projects.

2. Qualifications of external cooperators (contractors)

The contractor/s selected shall possess a Class A license in accordance with the provisions of Chapter 9 of Division 3 of the California Business and Professions Code.

D. Benefits and Costs

1. Budget Breakdown and Justification

a. Land Purchase/Easement		none anticipated
b. Planning/Design/Engineering		\$ 1500.00 Westhaven CSD
c. Materials / Installation	1.	\$ 3580.00 102 angle meter valves
	2.	\$ 550.00 103 meter couplings
	3.	\$ 175.00 7 corporation stops
	4.	\$ 105.00 7 service saddles
	5.	\$ 500.00 7 service laterals
	6.	\$ 300.00 7 meter boxes with lids
	7.	\$ 33,945.00 contract labor
		(see Attachment A)
d. Structures		none anticipated
e. Equipment Purchase/Rentals		none anticipated

CONSOLIDATED WATER USE EFFICIENCY 2002 PROPOSAL
WESTHAVEN COMMUNITY SERVICES DISTRICT

f. Environmental Mitigation/Enhancement	none anticipated	
g. Construction/Administration/Overhead	\$ 1500.00	Westhaven CSD
h. Project/Legal/License Fees	none anticipated	
i. Contingency	\$ 6325.00	

A 15% contingency is added to the estimated project total to allow for unknown time requirements for locating 11 of the existing service valves and for unanticipated conditions which may be encountered during the installation process.

j. Other

Total Cost Estimate	\$ 48,480.00
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2. Cost-Sharing

Not applicable

3. Benefit Summary and Breakdown

WCSD has been reading its meters monthly since September 1995. Once the meter installation project is completed, the WCSD will read the new meters monthly as well. The information gathered will be maintained by the district and will allow the District to

- develop and maintain useful and equitable water management planning,
- monitor and periodically evaluate its capacity to provide service connections,
- monitor water usage,
- identify distribution system leakage and water theft,
- develop a rational and fair commodity based pricing structure,
- promote water conservation and reduce dry year demand and
- participate in regional resource management planning.

Metering with commodity rates for all connections might be expected to produce a reduction in demand of as much as 20% (DWR Bulletin 160-98, appendix 4B-2. #4.). Such an increase in available supply would allow the District to provide an additional 45 service connections. A reduction in demand significantly less than 20% would still create surplus water sufficient to provide the District revenues well in excess of the cost of this project.

CONSOLIDATED WATER USE EFFICIENCY 2002 PROPOSAL
WESTHAVEN COMMUNITY SERVICES DISTRICT

If full metering produces an increased water supply sufficient to allow new connections, the District will be able to service existing residences identified as having contaminated or insufficient private water sources. This would be of great benefit to the health and welfare of the community.

If the District can add just 9 new connections, the System Capacity Charges for these alone will exceed the entire cost of this project. Additional revenues generated by the collection of System Capacity Charges could be used toward the cost of replacing substandard portions of the District's distribution system.

Empowering customers to control their water costs by adjusting their use will produce fairness currently missing in the District's pricing structure. By converting from a partially metered to a fully metered system, the WCSD will also be able to identify and reduce irrecoverable water losses, improve its water quality and attain environmental benefits through reportable water use efficiency. These outcomes and benefits will be shared by the entire service community.

4. Assessment of Costs and Benefits

Department of Water Resources Bulletin 160-98, Appendix 4B -2. #4 predicts water savings of 20% when all accounts are metered and billed by volume. The District currently serves 226 accounts. If the District could serve an additional 20%, this would amount to 45 new service connections. At the District's current System Capacity Charge of \$5,895.00, these 45 new connections would bring in \$265,275.00, more than six times the anticipated cost of this installation project.

E. Outreach, Community Involvement and Acceptance

Westhaven is an unincorporated, almost entirely residential, community in Humboldt County. The WCSD is Westhaven's only governmental entity. Those people who may be affected by the meter installation project are existing and future WCSD customers. WCSD residents represent a broad socio-economic spectrum that includes a significant population of low income and elderly people. Simple economics of scale cause WCSD's water rates to be higher than average. Debt service on the WCSD's Department of Water Resources loan obtained in 1990 adds \$11.00 per month to each bill. Since before the process of meter installation began in 1995 and throughout the process, the WCSD has received many requests from customers for conversion to commodity based rates. The community is generally in favor of any improvements that will give individual customers some degree of control over the amounts of their water bills. The WCSD plans a series of public meetings to facilitate customers' involvement in implementing a use-based rate structure.

ATTACHMENT A			METER INSTALLATION DATA SHEET						
WESTHAVEN COMMUNITY SERVICES DISTRICT CONSOLIDATED WATER USE EFFICIENCY PROPOSAL 2002									
READ	WCSD	NAME	ADDRESS	INSTALL	COST	PER / HR	HR	TOTAL	REMARKS
SEQ	ACCT			GROUP	BASIS	COST	EST.	COST	
9	15	Berry, A	920 Driver	A	one plumber	120	1	120	
11	165	Schulz	6th - vacant	A	one laborer	120	4	480	locate WMWC valve
71	193	Holtz	625 Highland	A	service truck	120	1	120	
72	48	Lawson	636 Highland	A		120	1	120	
74	152	Pringle	686 Highland	A		120	1	120	has meter valve and blank
75	155	Reynolds	724 Highland	A		120	1	120	
76	63	Doe	753 Highland	A		120	1	120	
77	8	Arbo	725 Highland	A		120	2	240	needs resetter
78	43	Clark, C.	689 Highland	A		120	1	120	
82	113	Lafer	640 Spring	A		120	1	120	
84	106	Loretz	471 Sixth	A		120	1	120	
85	182	Swisher	453 Sixth	A		120	1	120	
86	139	Moon, J.	447 Sixth	A		120	1	120	
88	118	Anderson, C	435 Sixth	A		120	1	120	
89	54	d'Usseau	429 Sixth	A		120	1	120	
90	46	Johnson	415 Sixth	A		120	2	240	off old valve (locate on 6th)
95	71	Slamkowski	428 Seventh	A		120	1	120	
96	120	Lusk, L.	418 Seventh	A		120	1	120	
97	67	Edmiston	683 Kahlstrom	A		120	1	120	
110	172	Snapp	290 Sixth	A		120	4	480	locate WMWC valve
118	136	Mayo	512 Sixth	A		120	1	120	
120	9	Aroyan	482 Highland	A		120	1	120	
121	192	Elinsky	470 Highland	A		120	1	120	
123	141	Moon, M.	Highland - vacant	A		120	1	120	
124	162	Ely	414 Highland	A		120	1	120	
125	190	Cooper	414 Sixth	A		120	2	240	relocate outside fence
127	233	WVFD	446 Sixth	A		120	1	120	
128	104	Jermyn	471 Highland	A		120	1	120	
129	121	Lusk, R.	482 Sixth	A		120	1	120	
130	77	Georgantes	494 Sixth	A		120	1	120	
131	88	Harrison	586 S Wsthn	A		120	1	120	relocate outside fence
134	196	Woodworth	512 Fifth	A		120	1	120	
135	44	Clark, P.	496 Fifth	A		120	1	120	
136	168	Sheppard	480 Fifth	A		120	1	120	
139	169	Turner	459 Fifth	A		120	4	480	locate WMWC valve
142	45	Clary	495 Fifth	A		120	1	120	
143	24	Bosler	515 Fifth	A		120	1	120	
149	134	Matson	237 S Wsthn	A		120	1	120	has meter valve - no tailpiece
150	157	Masters	85 S Wsthn	A		120	1	120	
159	103	Isackson	80 Sea Drift	A		120	1	120	
160	83	Graham	98 Sea Drift	A		120	1	120	
162	20	Berry, G.	47 Rayipa	A		120	1	120	
163	18	Berry, G.	97 Rayipa	A		120	1	120	
164	17	Berry, G.	83 Rayipa	A		120	1	120	
165	19	Berry, G.	98 Rayipa	A		120	1	120	

ATTACHMENT A			METER INSTALLATION DATA SHEET						
WESTHAVEN COMMUNITY SERVICES DISTRICT CONSOLIDATED WATER USE EFFICIENCY PROPOSAL 2002									
READ	WCSD	NAME	ADDRESS	INSTALL	COST	PER / HR	HR	TOTAL	REMARKS
SEQ	ACCT			GROUP	BASIS	COST	EST.	COST	
167	93	Hendricks	62 Rayipa	A		120	2	240	
169	21	Berry, G.	54 Rayipa	A		120	2	240	
172	146	Knaus	10 Metsko	A		120	1	120	
173	31	Butler	44 Metsko	A		120	1	120	
174	6	Anderson	52 Metsko	A		120	4	480	
175	7	Anderson	52 Metsko	A		120	4	480	install tap for second service
176	186	Vinyard	68 Metskp	A		120	4	480	relocate to end of main
178	29	Bruckner	25 Metsko	A		120	1	120	
179	97	Holmes	637 Driver	A		120	1	120	
181	30	Moser	677 Driver	A		120	1	120	
182	132	Marshall	719 Driver	A		120	1	120	
183	115	Lapadura	84 Haven	A		120	1	120	
184	15	Berry, A	994 First	A		120	1	120	
191	108	Kirkewoog	770 First	A		120	1	120	
194	131	Marasco	806 Second	A		120	4	480	locate WMWC valve
195	187	Joyer	800 Second	A		120	1	120	
196	41	Christian	775 Second	A		120	1	120	
205	5	Amner	749 Fourth	A		120	1	120	
206	34	Butolph	716 Fourth	A		120	4	480	locate WMWC valve
207	76	Gardner	749 Third	A		120	4	480	locate WMWC valve
208	112	Kosulandich	650 Third	A		120	1	120	
209	111	Kosulandich	638 Third	A		120	1	120	
210	170	Salzman	617 Second	A		120	1	120	
216	119	McFarland	718 Second	A		120	1	120	
217	117	Roskam	684 Second	A		120	1	120	
218	53	Faigle	650 Second	A		120	1	120	
222	42	Hafar	685 Second	A		120	1	120	
225	58	Delo	748 Second	A		120	1	120	
1	55	Dawson	1021 Driver Rd.	B	one plumber	155	8	1240	need svc. line from 4th (400 ft.)
83	114	Lafer (Rntl)	640 Spring	B	one laborer	155	6	930	install tap for second service
93	81	Langford	421 Seventh	B	back hoe	155	4	620	
94	107	Kamber	438 Seventh	B		155	4	620	locate WMWC valve
108	167	Shelburn	910 Kay	B		155	4	620	new - off proposed main
109	10	Barthman	940 Kay	B		155	4	620	new - off proposed main
117	51	Cooper	382 Sixth	B		155	6	930	no WMWC valve
119	64	Nachem	496 Highland	B		155	4	620	locate WMWC valve or new tap
122	99	McDevitt	460 Highland	B		155	2	310	relocate outside fence
126	65	Jones, L	428 Sixth	B		155	6	930	new tap E end of lot on Highland
138	143	Mossman	425 Fifth	B		155	2	310	relocate to end of lane
141	145	Norris	481 Fifth	B		155	2	310	no WMWC valve
145	40	Chatterton	575 Fifth	B		155	2	310	locate WMWC valve
146	39	Chatterton	575 Fifth	B		155	2	310	install tap for second service
158	180	Stratte-McCl	62 Sea Drift	B		155	3	465	relocate to driveway edge
161	156	Mojibi	90 Sea Drift	B		155	4	620	relocate to gate - trace line
168	92	Hendricks	58 Rayipa	B		155	2	310	install tap for second service

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READ	WCSD	NAME	ADDRESS	INSTALL	COST	PER / HR	HR	TOTAL	REMARKS
SEQ	ACCT			GROUP	BASIS	COST	EST.	COST	
170	22	Berry, G.	50 Rayipa	B		155	2	310	install tap for second service
171	232	Knaus (Apt.)	10 Metsko	B		155	4	620	install tap for second service
188	37	Calkins	886 First	B		155	4	620	install tap for second service
203	174	Snell	822 Third	B		155	4	620	connect to new lateral from Phase II
215	150	Petroccitto	681 Third	B		155	4	620	relocate outside yard on 3rd
79	13	Berman	635 Highland	C	one plumber	215	6	1290	install new tap to relocate to current lot
103	28	Brown	693 Kay	C	two laborers	215	4	860	pavement
147	12	Benedetto	302 S Wsthrn	C	back hoe	215	4	860	relocate to road edge
148	68	Cordova	240 S Wsthrn	C		215	4	860	relocate to road edge
151	94	Higbee	110 S Wsthrn	C		215	6	1290	relocate from under house
212	126	McDonald, E.	551 Second	C		215	8	1720	new tap - from 3rd Ave. main
226	90	Berry, M.	520 Second	C		215	8	1720	new tap - from 3rd Ave. main
104 services									
			INSTALLATION TOTAL					33945	contractor's per hour cost estimates at state
									prevailing wages per Whitson Plumbing
			VALVES AND FITTINGS					5210	Willow Creek CA - Class A license
			PLANNING - WCSD					1500	
			ADMIN - WCSD					1500	
			PROJECT TOTAL					42155	
Non Eligible Accounts									
4	25	Bremm	Vacant						has meter valve
11	184	Schulz	Vacant						has meter valve
115	49	Cooper	Vacant						place of use not designated
116	50	Cooper	Vacant						place of use not designated
133	89	Snell	Vacant						place of use not designated
137	69	Ferguson	Vacant						place of use not designated
153	161	Santos	Vacant						place of use not designated
157	59	Berry, G.	Vacant						place of use not designated
180	96	Holmes	Vacant						place of use not designated
9 services									